

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Assignee: SAMSUNG ELECTRONICS CO., LTD.

Title: Liquid Crystal Display and Driving Method Thereof

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Examiner: Cory A. Almeida Group Art Unit: 2629

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Dear Sir:

In response to the Final Office Action dated December 6, 2010, Applicants hereby submit this Pre-Appeal Brief Request for Review. This request is being filed with a Notice of Appeal. The review is requested for the reasons stated below.

Claim Rejections 35 U.S.C. §102

Claims 1-3, 6, 11-13 and 21-23 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Application Publication No. 2001/0004253 to Fukutoku et al., herein referred to as "Fukutoku."

Of the above-referenced claims, Claims 1, 11 and 21 - 23 are independent. Accordingly, once allowability of these claims is established, all claims depending therefrom are likewise allowable.

Claims 1, 11 and 21 - 23 each recite, in part "wherinc the signal controller comprises: a line counter for determining a row to which the block belongs; and a block counter for determining the position of the block in the row" (emphasis added).

In rejecting Claims 1, 11 and 21 - 23, the Office Action alleges that FIG. 11, #48 of Fukutoku, which is a “vertical pattern counting section” (Fukutoku, FIG. 11) corresponds to “a line counter for determining a row to which the block belongs” as recited in Claims 1, 11 and 21 - 23, and that FIG. 11, #44 of Fukutoku, which is a “horizontal pattern counting section” (Fukutoku, FIG. 11) corresponds to “a block counter for determining the position of the block in the row” as recited in Claims 1, 11 and 21 - 23 (Office Action, pages 3, 5, 6 and 8). Applicants respectfully disagree.

With respect to the “vertical pattern counting section 48,” Fukutoku discloses:

The vertical pattern counting section 48 counts the number of lines having different size relationships from those of the next line in the vertical direction, as shown in FIG. 17, based on the output of the vertical pattern comparing section 47 (step S18). When the number of lines having different size relationships from those of the next line in the vertical direction reaches a predetermined value, the output signal is set to be "H" (step S19). (emphasis added) (Fukutoku, [0098]).

Counting “the number of lines having different size relationships” as disclosed in Fukutoku, is *not* “determining a row to which the block belongs” as recited in Claims 1, 11 and 21 - 23. Thus the “vertical pattern counting section 48” of Fukutoku does not correspond to the “a line counter for determining a row to which the block belongs” as recited in Claims 1, 11 and 21 - 23.

With respect to the “horizontal pattern counting section 44,” Fukutoku discloses:

The horizontal pattern counting section 44 counts the number of repetitions of the same pattern detected by the same pattern of a size relationship detecting section 43 (step S14). When the same pattern repeats at least a certain number of times, the horizontal pattern information storing section 45 stores the size relationship pattern in a shift register (step S15). In the example of FIG. 15, as the size relationship pattern, OR="L", OG="H", OB="H", ER="H", EG="L" and EB="L" are stored. For example, when OR and ER store "L" and "H", respectively, this indicates that the gradation difference between the R image data of the odd-numbered pixel and the R image data of the even-numbered pixel is equal to or more than a certain gradation difference and that the pattern repeats in one line (one horizontal

synchronizing period) at least a certain number of times. (emphasis added) (Fukutoku, [0096]).

Counting “the number of repetitions of the same pattern detected by the same pattern of a size relationship detection section 43” is *not* “determining the position of the block in the row” as recited in Claims 1, 11 and 21 - 23. Thus, the “horizontal pattern counting section 44” of Fukutoku does not correspond to “a block counter for determining the position of the block in the row” as recited in Claims 1, 11 and 21 - 23.

In the “Response to Arguments,” the Office Action states:

the paragraphs cited from Fukutoku along with paragraphs surrounding disclose that Fukutoku systematically goes through the rows and columns of the display to determine whether a pattern exists or not. In order to systematically go through the entire display screen Fukutoku needs to keep track of what row and column it is currently checking for the pattern, which reads on the claim language presented above. (Office Action, page 9).

Applicants respectfully disagree. Fukutoku discloses “detecting section 43 detects the same size relationship pattern based on the signals outputted from the gradation difference judging section 41 and the size relationship detecting section 42” (emphasis added) (Fukutoku, [0095]) and “when the same pattern repeats at least a certain number of times, the horizontal pattern information storing section 45 stores the size relationship pattern” (emphasis added) (Fukutoku, [0096]). None of these operations are “determining the position of the block in the row” as recited in Claims 1, 11 and 21 - 23. Furthermore, none of these operations “need” to determine “the position of the block in the row” as recited in Claims 1, 11 and 21 - 23. Determining a “gradation difference” and detecting a “size relationship” are operations that determine *relative* differences and relationships, and thus do not “need” “the position of the block in the row” as recited in Claims 1, 11 and 21 - 23. Identifying “when the same pattern repeats at least a certain number of times” is also not an operation that “needs” “the position of the block in the row” as recited in Claims 1, 11 and 21 - 23, as it can be performed by a simple counter.

Fukutoku also discloses “vertical pattern comparing section 47 compares a series of picture element patterns in the vertical direction with one another … that is, … it compares the image data of the Nth line with the image data of the N+1th line …” (Amsden, [0097]) and

“vertical pattern counting section 48 counts the number of lines having different size relationship from those of the next line” (Amsden, [0098]). Counting “the number of lines having different size relationships” and “vertical pattern comparing” are *not* “determining a row to which the block belongs” as recited in Claims 1, 11 and 21 - 23. Furthermore, comparing “image data of an Nth line with image data of an N+1th line” is, again, not an operation that “needs” to determine “a row to which the block belongs” as recited in Claims 1, 11 and 21 – 23, as it can be determined on a relative basis.

Thus, Fukutoku does not disclose “wherein the signal controller comprises: a line counter for determining a row to which the block belongs; and a block counter for determining the position of the block in the row” as recited in Claims 1, 11 and 21 - 23.

For at least this reason, Applicants respectfully submit independent Claims 1, 11 and 21 - 23, and all claims depending therefrom are patentable.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. §102(b).

Claim Rejections 35 U.S.C. §103

Claims 8, 9 and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Fukutoku in view of Clark (U.S. Patent No. 3,925,777), herein referred to as “Clark.”

Claims 10 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Fukutoku in view of Baron (U.S. Patent No. 3,740,743), herein referred to as “Baron.”

The above-referenced claims are dependent from independent Claims 1 and 11. Accordingly, once allowability of Claims 1 and 11 is established, all claims depending therefrom are likewise allowable.

Claims 1 and 11 each recite, in part “wherein the signal controller comprises: a line counter for determining a row to which the block belongs; and a block counter for determining the position of the block in the row.” As discussed above, Fukutoku does not disclose, nor does Fukutoku suggest “wherein the signal controller comprises: a line counter for determining a row to which the block belongs; and a block counter for determining the position of the block in the row.”

Clark and Baron do not correct the defects of Fukutoku.

For at least this reason, Applicants respectfully submit independent Claims 1 and 11, and all claims depending therefrom are patentable.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. §103(a).

CONCLUSION

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 50-5029 for any matter in connection with this response, including any fee for extension of time and/or fee for additional claims, which may be required. If there are any questions or concerns, please contact the undersigned attorney at (408) 331-1674 or at sholmbeck@innovationcounsel.com.

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